

### **What is Claimed is**

1. A Light emitting diode compensating circuit comprising:
  - A. a current input electrically coupled to a substantially constant power source;
  - B. a plurality of light emitting diodes connected in series, said light emitting diodes being connected to said power source;
  - C. a signal input electrically downstream from said light emitting diodes, said signal input being constructed and arranged to transmit a current drop occurring across said light emitting diodes upon exposure to said power source; and
  - D. at least one controller in communication with said signal input, said controller being electrically coupled to said current input, said controller being constructed and arranged to process said current drop and to adjust said power provided to said light emitting diodes.
2. The compensating circuit according to claim 1, said controller comprising a look-up table having stored data representative of electrical specifications for combinations of light emitting diodes.
3. The compensating circuit according to claim 2, said look-up table comprising data representative of electrical specifications of light emitting diodes of different colors.
4. The compensating circuit according to claim 3, wherein said controller accesses said look-up table for identification of at least one current analysis value.
5. The compensating circuit according to claim 4, said controller further comprising processing software.
6. The compensating circuit according to claim 5, said processing software being constructed and arranged to analyze said current drop compared to said at least one

current analysis value to adjust power provided to said light emitting diodes.

7. The compensating circuit according to claim 6, said controller being constructed and arranged to illuminate said light emitting diodes for the provision of different types of light signals.

8. The compensating circuit according to claim 7, said controller being constructed and arranged to illuminate said light emitting diodes for the provision of a plurality of combinations of light signals.

9. The compensating circuit according to claim 8, wherein said light emitting diodes are of the same color.

10. The compensating circuit according to claim 9, wherein said light emitting diodes are from the same manufacturing lot.

11. The compensating circuit according to claim 1, said circuit further comprising a compensator electrically connected to said light emitting diodes downstream from said light emitting diodes and electrically upstream from said signal input.

12. The compensating circuit according to claim 11, wherein said compensator is constructed and arranged to initially alter the current drop across said light emitting diodes wherein said compensating circuit conforms to the electrical specifications for an electrical fixture.

13. The compensating circuit according to claim 12, wherein said alteration of said current drop across said light emitting diodes occurs prior to the provision of power to said light emitting diodes.

14. The compensating circuit according to claim 13, said compensator comprising a zener diode.

15. A light emitting diode compensating circuit comprising:
- A. a current input electrically coupled to a substantially constant power source;
  - B. a plurality of light emitting diodes connected in series, said light emitting diodes being connected to said power source; and
  - C. a compensator electrically connected to said light emitting diodes downstream from said light emitting diodes, said compensator being constructed and arranged to initially alter the current drop across said light emitting diodes wherein said compensating circuit conforms to the electrical specifications for an electrical fixture.
16. The compensating circuit according to claim 15 further comprising at least one controller in communication with said compensating circuit, said controller being in electrically coupled to said current input, said controller being constructed and arranged to process said current drop and to adjust said power provided to said light emitting diodes.